to vomiting. To the depression succeeds a period of excitement, convulsions, contractions, &c. Iodoform is quite destitute of any local irritant action, and does not occasion the slightest vascularity of the mucous membrane of the stomach or of the intestine. The therapeutical properties of iodoform, according to MM. Moretin and Humbert, are the following: 1. In consequence of the great quantity of iodine which it contains, it may be substituted for iodine, and the iodides in all the cases in which the latter agents are indicated. 2. The absorption of iodoform occurs with the greatest facility. 3. Iodoform, applied to therapeutics, possesses over other iodic medicines the advantage of not exciting any local irritation, or any of those symptoms which require the suspension of the latter preparations. 4. Besides the properties which are common to it with iodine, iodoform possesses special virtues: it calms the pain of certain neuralgic affections, and causes a kind of local and partial anæsthesia of the rectum when it is deposited in that part. 5. The doses to which it may be carried are 5, 10, 15, 25, 50 centigrammes *per diem.* 6. The principal diseases in which iodoform has been employed with advantage are, endemic goitre, scrofulous disease, rachitis, syphilis, certain affections of the neck of the bladder or of the prostate, and some kinds of neuralgia. It may also be used in phthisis, in those cases in which iodine is employed with advantage.—*B. & F. Med.-Chirurg. Rev.*, Jan., 1857, from *L'Union Médicale*, Sept. 4, 1856.

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9. *Effects of the Tincture of Iodine applied locally on the Mucous and Serous Membranes, in relation to Pus.*—Dr. Boinet remarks that the contact of tincture of iodine with the mucous membranes is not at all painful; and that it is possible to paint, almost without the consciousness of the patients, the pharyngeal and buccal mucous membranes, the tonsils, the neck of the uterus, the vagina, &c., without causing any pain: on condition, however, of not allowing the tincture to touch the orifices of the mucous cavities—namely, the points where the mucous membrane terminates and the skin commences; for the pain is very severe, and is prolonged for a considerable time, whether the tincture is applied to the lips, the anal orifice, or the female external parts of generation. In these cases the patients experience a pain as intense as when the tincture of iodine is applied to the skin denuded of its epithelium, or to a recent wound. There is the same pain when the ocular or palpebral conjunctiva is touched for the treatment of certain inflammations of the eye, the removal of granulations, &c. If several successive paintings take place, the same change ensues on the mucous membranes as on the skin—namely, that desquamation having taken place, the pain becomes then very severe after the subsequent application. As to the serous membranes, the tincture of iodine always produces in them very severe and cutting pains, and in an instantaneous manner. But this pain is much less severe upon the articular membranes than on the peritoneum. The acute pain produced by the contact of the tincture of iodine with the peritoneum is, in fact, a certain sign which indicates that an ascites has been mistaken for an ovarian dropsy; inasmuch as, in the latter affection, the iodine injection is never painful. The pain is also a proof, when it arises with less intensity in injecting an ovarian cyst, that a certain quantity has penetrated into the peritoneum.—*B. & F. Med.-Chirurg. Rev.*, Jan., 1857, from *L'Union Médicale*, June 14, 1856.

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10. *Endermic Application of Iodide of Glycerine.*—Dr. F. Szukits, after enumerating the several forms in which iodine has hitherto been endermically applied, proceeds to remark, that all the solvents in ordinary use take up only a small quantity, with the exception of alcohol. It was therefore desirable to discover a solvent which, without affecting the skin like the alcoholic tincture, should take up as large a quantity as possible of the iodine. This solvent was found, in 1854, by Cap, in glycerine. Cap attributed to glycerine the part of a simple solvent, and he proposed it, among others, for the solution of bromine, iodine, oxyde of lead, strychnia, veratria, atropia, morphia, &c. To Dr. Richter belongs the credit of having first introduced into practice the solution of iodine in glycerine. He combined the iodine with iodide of potassium in order to facilitate the solution of the former; combined with this, it may be dissolved

in any quantity up to the proportion of almost three to five. But in this concentrated state it is a caustic solution, and too strong for common endermic use; and the author has proposed a proportion of one part of iodine and five parts of glycerine, as a solution which may be applied for a long time to the parts about the neck and to the female breast, without any inconvenience except a slight burning. In the neck and the female breast, the application, after two or three paintings, causes smart burning; and after four or five it produces more or less large excoriations, which require the discontinuance of the remedy and the application of cold fomentations. On the abdomen and in other parts, these symptoms occur much later. After a longer application of the iodide of glycerine, the epidermis peels off on the painted parts. The paintings were performed once a day in the author's cases, and paper of gutta percha was laid over the painted places to prevent evaporation. The paintings may be continued for a month without producing *iodism*, and without causing the slightest disturbance in the well-being of the patient. According to the experiments of Bonnet, the absorption and elimination of iodine may take place to the amount of a gramme of iodine (15.4 grains) per diem for several weeks, without any injury to the general health. The number of cases in which Dr. Szukits has employed the iodide of glycerine were 24, in some of which the most satisfactory results were obtained.—*B. & F. Med.-Chirurg. Rev.*, Jan., 1857, from *Wochenblatt der Gesells. der Aerzte zu Wien.* Sept. 1, 1856.

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11. *Subcutaneous Application of Medicinal Substances.* By Prof. KURZAK.—The inoculation of medicinal substances is performed very little by practical physicians. In Germany, Professor Langenbeck has tried a method somewhat modified by himself in a great number of medicines. The results are very interesting in their practical bearings. He calls this process the "hypodermic subcutaneous method."

The purpose of this proceeding is twofold: first, to bring a medicine immediately to bear upon a particular organ or part of the body, and secondly, by this application, to induce a derivation or revulsion. The absorption of the inoculated matter is facilitated by the very act of inoculation. But there are a number of substances, such as those which cannot be introduced in a fluid or semi-fluid state, the absorption of which is difficult and tedious; and these are mixed by Langenbeck with some exciting vehicle—such as croton oil, or tartar emetic, or both together. In the *inoculation by needle*, the instrument must pierce deeper than in vaccination—namely, into the cellular tissue beneath the skin—and a much larger quantity of matter must be introduced. The inoculation-needle, therefore, presents a two-edged point, has the shape of a myrtle-leaf, deeply hollowed on one side in the form of a spoon. This two-edged point passes into a narrow, blunt stem or neck, which is so fastened by a hinge to a handle with double plates, that the needle can be pushed in like a lancet. The course of inoculation by needle is that the parts become more or less red, and the skin warmer and harder. When the tissues are normal, there is formed a *passage* of the length of the needle introduced, and which feels hard and stringy, and is generally closed when the absorption into the deep part is completed. If the needle has been sunk from one point in several directions, there are several such *passages* formed, which often combine to form a small cavity. If the openings of the passages lie close together, an ulcer is formed by their union; it is then only necessary to introduce the medicine to be inoculated into this cavity; the substance is taken up in a short time into the canals passing from the ulcer, and generally in from four to six hours it has entirely disappeared. In the *inoculation by plaster*, the medicinal substance is laid upon a small skin-wound by means of a little thread of charpie, and kept in its place by a piece of sticking-plaster. The operation of this mode of subcutaneous inoculation is not so intense as in the needle inoculation.

A great variety of substances are enumerated by Langenbeck as having been employed by him in subcutaneous inoculation; and those were especially selected which are soluble in the cellular tissue or in the parenchyma of organs. For instance, strychnia was inoculated near the vertebral column for weakness of the spinal cord and paralysis; veratria for various skin diseases, as lepra,